

Author Index

- Badissa, S., 1
Baldi, G., 151, 161
Beg, S. A., B15
Bhatia, S., 101
Biswas, J., 175
Byerley, J. J., B49

Charles, A. M., B49
Chu, A. H. T., 73
Conti, R., 161
Crine, M., 141

Do, D. D., 175
Domenech, S., 129
Duduković, M. P., 17
Dutta, N. N., 111

Floquet, P., 129

Geike, R., 51
Gibbs, S. J., B29
Griffith, T. D., 73

Hassan, M. M., B15
Higuchi, J., B7
Hikita, H., 169
Houang, P., 1

Jang, W.-D., B1

Kamiwano, M., 93
Kanamori, T., B7
Karrila, S. J., B29
Kataoka, T., 41
Kawase, Y., 31
Kmieć, A., 59

Lai, S., 17
Lange, R., 51
Langer, S. H., 73
Leschonski, K., 59
L'Homme, G. A., 141
Lightfoot, E. N., B29

Marchot, P., 141
Mazzarino, I., 151
Mills, P. L., 17
Moo-Young, M. 31

Osella, M., 161
Oshima, M., B7

Pibouleau, L., 129

Raghavan, K. V., 111
Ramachandran, P. A., 17
Rangaiah, G. P., 123
Rovero, G., 161

Saito, F., 93
Sakai, K., B7
Sakai, T., B7
Sakurai, H., B7
Schaeffer, M., 1
Scharer, J. M., B49
Schmidt, W., B39
Schügerl, K., B39
Sicardi, S., 151, 161
Sreedharan, V., 101

Tashiro, K., B7
Torii, M., B7
Turek, F., 51

Wu, S.-C., B1
Wu, W.-I., B1

Yagi, H., 169
Yoshida, H., 41

Zoulalian, A., 1

Author Index

- Badissa, S., 1
Baldi, G., 151, 161
Beg, S. A., B15
Bhatia, S., 101
Biswas, J., 175
Byerley, J. J., B49

Charles, A. M., B49
Chu, A. H. T., 73
Conti, R., 161
Crine, M., 141

Do, D. D., 175
Domenech, S., 129
Duduković, M. P., 17
Dutta, N. N., 111

Floquet, P., 129

Geike, R., 51
Gibbs, S. J., B29
Griffith, T. D., 73

Hassan, M. M., B15
Higuchi, J., B7
Hikita, H., 169
Houang, P., 1

Jang, W.-D., B1

Kamiwano, M., 93
Kanamori, T., B7
Karrila, S. J., B29
Kataoka, T., 41
Kawase, Y., 31
Kmiec, A., 59

Lai, S., 17
Lange, R., 51
Langer, S. H., 73
Leschonski, K., 59
L'Homme, G. A., 141
Lightfoot, E. N., B29

Marchot, P., 141
Mazzarino, I., 151
Mills, P. L., 17
Moo-Young, M. 31

Osella, M., 161
Oshima, M., B7

Pibouleau, L., 129

Raghavan, K. V., 111
Ramachandran, P. A., 17
Rangaiah, G. P., 123
Rovero, G., 161

Saito, F., 93
Sakai, K., B7
Sakai, T., B7
Sakurai, H., B7
Schaeffer, M., 1
Scharer, J. M., B49
Schmidt, W., B39
Schügerl, K., B39
Sicardi, S., 151, 161
Sreedharan, V., 101

Tashiro, K., B7
Torii, M., B7
Turek, F., 51

Wu, S.-C., B1
Wu, W.-I., B1

Yagi, H., 169
Yoshida, H., 41

Zoulalian, A., 1

Subject Index

- Arrhenius parameters
 - adaptive methods for estimating Arrhenius parameters, 123
- Benzene monochlorination
 - optimisation of complex chemical procedures: study of a benzene monochlorination plant, 129
- Biosorption
 - uranium(VI) biosorption from process solutions, B49
- Blood
 - factors affecting plasma and blood viscosity and corresponding abnormalities in renal failure patients, 87
- Catalysts
 - problems encountered in the scale-up of a gas-liquid reaction in a stirred reactor with suspended catalyst, 51
 - vapour phase isomerization study of *m*-xylene over a nickel hydrogen mordenite catalyst, 101
 - unified theory of coking deactivation in a catalyst pellet, 175
- Chromatographic analysis
 - mass transfer to a sphere with a non-uniform boundary layer: implications in chromatographic analysis, B29
- Coking deactivation
 - unified theory of coking deactivation in a catalyst pellet, 175
- Contacting effectiveness
 - hydrodynamics and solid-liquid contacting effectiveness in an upflow multiphase reactor, 151
- Contactors
 - hydrodynamics of the gas phase in stirred gas-liquid contactors, 161
- Cultivation
 - on-line control for cultivation of *Saccharomyces cerevisiae* via weight moving identification, B1
- Dicyclopentadiene
 - multicolumn gas chromatographic reactor studies of the dissociation reactions of dicyclopentadiene and its methyl derivatives, 73
- Diffusion-reaction equations
 - solution methods for a class of linear and non-linear diffusion-reaction equations with mixed boundary conditions, 17
- Dissociation
 - multicolumn gas chromatographic reactor studies of the dissociation reactions of dicyclopentadiene and its methyl derivatives, 73
- Downflow liquid jet ejector
 - mass transfer and hydrodynamic characteristics of loop reactors with downflow liquid jet ejector, 11
- Energy dissipation rate concept
 - solid-turbulent fluid heat and mass transfer: a unified model based on the energy dissipation rate concept, 31
- Ethanol production
 - continuous ethanol production by *Zymomonas mobilis* on a synthetic medium, B39
- Flow
 - two-phase flow through a packed bed: a stochastic model based on percolation concepts, 141
- Fluids
 - solid-turbulent fluid heat and mass transfer: a unified model based on the energy dissipation rate concept, 31
- Gas absorption
 - gas absorption into a slurry accompanied by chemical reaction with solute from sparingly soluble particles, 169
- Gas chromatographic reactor
 - multicolumn gas chromatographic reactor studies of the dissociation reactions of dicyclopentadiene and its methyl derivatives, 73
- Gas-liquid reaction
 - problems encountered in the scale-up of a gas-liquid reaction in a stirred reactor with suspended catalyst, 51
- Gas phase
 - hydrodynamics of the gas phase in stirred gas-liquid contactors, 161
- Hydrodynamic characteristics
 - mass transfer and hydrodynamic characteristics of loop reactors with downflow liquid jet ejector, 11
- Hydrodynamic design
 - hydrodynamic design for non-aerated lagoons, 1
- Hydrodynamics
 - hydrodynamics and solid-liquid contacting effectiveness in an upflow multiphase reactor, 151
 - hydrodynamics of the gas phase in stirred gas-liquid contactors, 161
- Ion exchange column
 - dynamics in a thermally regenerable ion exchange column, 41
- Isomerization
 - vapour phase isomerization study of *m*-xylene over a nickel hydrogen mordenite catalyst, 101
- Kinetics
 - theoretical analysis of a packed-bed biological reactor for various reaction kinetics, B15

- Liquid-mixing systems
 - technique for prediction of the mixing time of high-viscosity liquid-mixing systems with negligible diffusivity of solute, 93
- Loop reactors
 - mass transfer and hydrodynamic characteristics of loop reactors with downflow liquid jet ejector, 11
- Mass transfer
 - mass transfer and hydrodynamic characteristics of loop reactors with downflow liquid jet ejector, 11
 - mass transfer to a sphere with a non-uniform boundary layer: implications in chromatographic analysis, B29
- Mass transfer
 - solid-turbulent fluid heat and mass transfer: a unified model based on the energy dissipation rate concept, 31
- Mixed boundary conditions
 - solution methods for a class of linear and non-linear diffusion-reaction equations with mixed boundary conditions, 17
- Mixing time
 - technique for prediction of the mixing time of high-viscosity liquid-mixing systems with negligible diffusivity of solute, 93
- Multicolumn gas chromatographic reactor
 - multicolumn gas chromatographic reactor studies of the dissociation reactions of dicyclopentadiene and its methyl derivatives, 73
- Nickel hydrogen mordenite
 - vapour phase isomerization study of *m*-xylene over a nickel hydrogen mordenite catalyst, 101
- Non-aerated lagoons
 - hydrodynamic design for non-aerated lagoons, 1
- On-line control
 - on-line control for cultivation of *Saccharomyces cerevisiae* via weight moving identification, B1
- Packed bed
 - two-phase flow through a packed bed: a stochastic model based on percolation concepts, 141
- Packed-bed biological reactor
 - theoretical analysis of a packed-bed biological reactor for various reaction kinetics, B15
- Percolation
 - two-phase flow through a packed bed: a stochastic model based on percolation concepts, 141
- Pipes
 - acceleration of the solid phase during pneumatic conveying in vertical pipes, 59
- Plasma
 - factors affecting plasma and blood viscosity and corresponding abnormalities in renal failure patients, B7
- Pneumatic conveying
 - acceleration of the solid phase during pneumatic conveying in vertical pipes 59
- Process solutions
 - uranium(VI) biosorption from process solutions, B49
- Renal failure patients
 - factors affecting plasma and blood viscosity and corresponding abnormalities in renal failure patients, B7
- Reactors
 - hydrodynamics and solid-liquid contacting effectiveness in an upflow multiphase reactor, 151
 - mass transfer and hydrodynamic characteristics of loop reactors with downflow liquid jet ejector, 11
 - multicolumn gas chromatographic reactor studies of the dissociation reactions of dicyclopentadiene and its methyl derivatives, 73
 - theoretical analysis of a packed-bed biological reactor for various reaction kinetics, B15
- Saccharomyces cerevisiae*
 - on-line control for cultivation of *Saccharomyces cerevisiae* via weight moving identification, B1
- Slurry
 - gas absorption into a slurry accompanied by chemical reaction with solute from sparingly soluble particles, 169
- Solid phase
 - acceleration of the solid phase during pneumatic conveying in vertical pipes, 59
- Stirred gas-liquid contactors
 - hydrodynamics of the gas phase in stirred gas-liquid contactors, 161
- Stirred reactor
 - problems encountered in the scale-up of a gas-liquid reaction in a stirred reactor with suspended catalyst, 51
- Synthetic medium
 - continuous ethanol production by *Zymomonas mobilis* on a synthetic medium, B39
- Upflow multiphase reactor
 - hydrodynamics and solid-liquid contacting effectiveness in an upflow multiphase reactor, 151
- Uranium(VI) biosorption
 - uranium(VI) biosorption from process solutions, B49
- Vapour phase
 - vapour phase isomerization study of *m*-xylene over a nickel hydrogen mordenite catalyst, 101
- Viscosity
 - factors affecting plasma and blood viscosity and corresponding abnormalities in renal failure patients, B7
- Weight moving identification
 - on-line control for cultivation of *Saccharomyces cerevisiae* via weight moving identification, B1
- Xylene
 - vapour phase isomerization study of *m*-xylene over a nickel hydrogen mordenite catalyst, 101
- Zymomonas mobilis*
 - continuous ethanol production by *Zymomonas mobilis* on a synthetic medium, B39

